

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-13 and add claims 14-23 as indicated below. A complete listing of claims pending in the application following entry of this Amendment are presented as follows:

1-13. (Cancelled)

14. (New) A vending machine, comprising:

a plurality of storing means each capable of storing a plurality of commodities in an upright state;

a taking-out position for a commodity being provided with each of the plurality of storing means;

gripping means capable of gripping the commodity as remaining in an upright state;

moving means capable of moving the gripping means up and down, left and right, and back and forth; and

a carrying-out position for the commodity being provided in the vending machine;

wherein each of the plurality of storing means has an inclined bottom surface for sliding the commodities as remaining in the upright state to the taking-out position, left and right guide portions for controlling a sliding direction of the commodities, and a stopper portion for stopping the commodities and locating one of the commodities at the taking-out position,

whereby the vending machine performs a carrying-out of the commodity by gripping and taking out the commodity located at the taking-out position of a predetermined storing means by the gripping means, moving the gripping means to the carrying-out position, and releasing the gripping of the commodity by the gripping means at the carrying-out position.

15. (New) The vending machine according to claim 14, wherein the inclined bottom surface includes a plurality of rollers lined up in parallel back and forth.

16. (New) The vending machine according to claim 14, wherein the left and right guide portions are provided with a left and right interval so that the commodities line up almost in a line toward the taking-out position.

17. (New) The vending machine according to claim 14, wherein the gripping means comprises at least a pair of left and right fingers for gripping the commodity, and a finger drive mechanism for open-and-close driving the fingers.
18. (New) The vending machine according to claim 17, wherein the drive mechanism includes a left finger drive mechanism and a right finger drive mechanism.
19. (New) The vending machine according to claim 17, wherein the gripping means comprises a bearing member for supporting the under surface of the commodity held by the fingers, and a bearing member drive mechanism for moving the bearing member back and forth.
20. (New) The vending machine according to claim 14, wherein the moving means comprises an up-and-down slider capable of moving up and down, an up-and-down slider drive mechanism for moving the up-and-down slider, a left-and-right slider provided on the up-and-down slider and capable of moving left and right, a left-and-right slider drive mechanism for moving the left-and-right slider left and right, a back-and-forth slider provided on the left-and-right slider and capable of moving back and forth, and a back-and-forth drive mechanism for moving the back-and-forth slider back and forth.
21. (New) The vending machine according to claim 14, further comprising:
imaging means provided on the gripping means for imaging the commodity located at the taking-out position and obtaining an image data, and
position correction means for performing a positioning of the gripping means before gripping the commodity located at the taking-out position based on the image data obtained by the imaging means.
22. (New) The vending machine according to claim 21, wherein the position correction means includes means for processing the image data obtained by the imaging means and recognizing back-and-forth and left-and-right positions of the commodity located at the taking-out position.
23. (New) The vending machine according to claim 21, further comprising:

presence or absence discriminating means for discriminating the presence or absence of the commodity located at the taking-out position based on the image data obtained by the imaging means, and

indication means for displaying an out-of-stock indication when the commodity is out of stock.